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EXAMINER

FOX, JAMAL A

ART UNIT PAPER NUMBER

2664

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,677

Applicant(s)

MATTESON ET AL.

Examiner

Jamal A. Fox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dobbins et al. (U.S. Patent No. 5,790,546).

Referring to claim 1, Dobbins et al. discloses a method for forming a network including a plurality of communication devices (Fig. 4, Networking Modules 32 and respective portions of the spec.), a wire network (Fig. 1 and respective portions of the spec.) for allowing a plurality of communication transmissions (networking connectivity between modules, col. 13 lines 41-48) between the communications devices, and at least one connectivity device connected to the wire network, said method comprising the steps of: utilizing the connectivity device (repeater module, col. 13 lines 34-41) to perform a repeater function including regenerating a communication signal such that the distance between the communications device is extended; utilizing the connectivity device (Fig. 6. Router) to perform a routing function including routing (this is inherent) communication transmissions by the communication devices through the wire network; and communicating, by a central processing unit (Fig. 5 ref. sign 41, Fig. 6 ref. sign CPU, col. 13 lines 54-67, col. 14 lines 17-45, col. 15 lines 50-56, col. 26 lines 64-67 and col. 32 lines 37-67) located within the connectivity device, with a network hub device (bridge or router, col. 4 lines 13-27, col. 24 lines 30-61 and col. 26 lines 38-57) located within the connectivity

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device and a network switch (Fig. 5 ref. sign 40 and col. 13 lines 54-67) device located within the connectivity device, wherein the network hub device performs a hub function including interconnecting the communication devices by bringing segments (paths, col. 4 lines 13-27 and segments, col. 13 lines 48-53) of the wire network together, and the network switch performs a switching function including reducing communication collisions (fault tolerance, col. 14 lines 52-56 and Fig. 6, Fault Tolerant Design) by providing communication transmissions from the communications devices with independent paths (separate, col. 14 lines 1-16 and paths, col. 3 lines 59-61 and col. 17 lines 14-17) through the wire network; and integrating, within the connectivity device, a first function set (five functions, col. 4 lines 4-12 and five management service functions, col. 10 lines 7-18) and a second function set (see functionality, col. 14 lines 25-28), wherein the first function set includes a function (directory services, network access security services, accounting services and bandwidth management, col. 4 lines 4-12 and col. 10 lines 7-18) other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing (routing, col. 4 lines 4-12) function, and the repeater function.

Referring to claim 2, Dobbins et al. discloses a method in accordance with claim 1 further comprising the steps of: connecting one of the connectivity devices (Figures 5 and 6 and respective portions of the spec.) to a communications device; and connecting the communications device to the wire network (LAN segment, col. 13 lines 48-53) utilizing the connectivity device (Figures 1, 2 and 3 and respective portions of the spec.).

Referring to claim 3, Dobbins et al. discloses a method in accordance with claim 1 further comprising the step of configuring the network to include at least one of network hub device

(bridge or router, col. 4 lines 13-27, col. 24 lines 30-61 and col. 26 lines 38-57), the network switch device (Fig. 5 ref. sign 40 and col. 13 lines 54-67), a network repeater device (repeater module, col. 13 lines 34-41) and a network router device (Fig. 6 ref. sign ROUTER and respective portions of the spec.).

Referring to claim 4, Dobbins et al. discloses a method in accordance with claim 1 further comprising the step of utilizing the connectivity device in a wire network having a topology of at least one of a daisy-chain configuration (Fig. 1 and respective portions of the spec.), a ring configuration (Token Ring, col. 13 lines 48-53), and a star configuration.

Referring to claim 5, Dobbins et al. discloses a method in accordance with claim 1 further comprising the step of utilizing the connectivity device to enable Single Point of Connect (given port, col. 11 lines 10-15 and Fig. 7B ref. sign 80) capability within the network.

Referring to claim 6, Dobbins et al. discloses a method in accordance with claim 1 further comprising the step of utilizing the connectivity device as at least one of a network fault tolerant device and a network fault tolerant management device (C++ OOP, col. 14 lines 20-25, fault tolerance, col. 14 lines 52-56 and Fig. 6, Fault Tolerant Design).

Referring to claim 7, Dobbins et al. discloses a network system (Fig. 4) comprising: a plurality of communications devices (Fig. 4, Networking Modules 32 and respective portions of the spec.) configured to communicate with each other (networking connectivity between modules, col. 13 lines 41-48); a wire network (Fig. 1 and respective portions of the spec.) configured to interconnect said communications devices and allow a plurality of communication transmissions (transmissions, col. 14 lines 29-34, col. 19 lines 15-22 and col. 23 lines 13-18) between said communication devices; a network connectivity device (Fig. 4, Network Chassis

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30) connected to said wire network, said connectivity device configured to: perform a repeater function including amplifying communication transmissions such that the distance between said communications device is extended (Fig. 4, repeater modules); and perform a routing function including routing (Fig. 4, router modules) communication transmissions through said wire network; and a central processing unit (Fig. 5 ref. sign 41, Fig. 6 ref. sign CPU, col. 13 lines 54-67, col. 14 lines 17-45, col. 15 lines 50-56, col. 26 lines 64-67 and col. 32 lines 37-67) located within said network connectivity device and configured to communicate with a network hub device (bridge or router, col. 4 lines 13-27, col. 24 lines 30-61 and col. 26 lines 38-57) located within said network connectivity device and a network switch device (Fig. 5 ref. sign 40 and col. 13 lines 54-67) located within said network connectivity device, wherein said network hub device configured to perform a hub function including interconnecting said communication devices by bringing segments (paths, col. 4 lines 13-27 and segments, col. 13 lines 48-53) of said wire network together, and said network switch device configured to perform a switching function including reducing communication collisions (fault tolerance, col. 14 lines 52-56 and Fig. 6, Fault Tolerant Design) by providing communication transmissions from said communications devices with independent paths (separate, col. 14 lines 1-16 and paths, col. 3 lines 59-61 and col. 17 lines 14-17) through said wire network; and said connectivity device configured to integrate a first function set (five functions, col. 4 lines 4-12 and five management service functions, col. 10 lines 7-18) and a second function set (see functionality, col. 14 lines 25-28), wherein the first function set includes a function (directory services, network access security services, accounting services and bandwidth management, col. 4 lines 4-12 and col. 10 lines 7-18) other than the hub function, the switching function, the routing function, and the

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repeater function, and the second function set includes at least one of the hub function, the switching function, the routing (routing, col. 4 lines 4-12) function, and the repeater function.

Referring to claim 8, Dobbins et al. discloses a system in accordance with claim 7 wherein each said communication device is connected to said wire network (LAN segment, col. 13 lines 48-53 and Figures 1, 2 and 3 and respective portions of the spec.) using of said network connectivity devices (Figures 5 and 6 and respective portions of the spec.).

Referring to claim 9, Dobbins et al. discloses a system in accordance with claim 7 wherein said network system further comprises at least one of the network hub device (bridge or router, col. 4 lines 13-27, col. 24 lines 30-61 and col. 26 lines 38-57), the network switch device (Fig. 5 ref. sign 40 and col. 13 lines 54-67), a network repeater device (repeater module, col. 13 lines 34-41), and a network router device (Fig. 6 ref. sign ROUTER and respective portions of the spec.).

Referring to claim 10, Dobbins et al. discloses a system in accordance with claim 7 wherein said wire network comprises a means (Bus, Fig. 2 and Fig. 3 and respective portions of the spec.) suitable for carrying data and communication transmissions.

Referring to claim 11, Dobbins et al. discloses a system in accordance with claim 7 wherein said connectivity device configured to operate when said wire network uses a topology of at least one of daisy-chain configuration (Fig. 1 and respective portions of the spec.), a ring configuration (Token Ring, col. 13 lines 48-53), and a star configuration.

Referring to claim 12, Dobbins et al. discloses a system in accordance in with claim 7 wherein said connectivity device further configured to enable SPOC (given port, col. 11 lines 10-15 and Fig. 7B ref. sign 80) capability within said network.

Referring to claim 13, Dobbins et al. discloses a system in accordance with claim 7 wherein said connectivity device further configured to function as at least one of a network fault tolerant device and a network fault management device (C++ OOP, col. 14 lines 20-25, fault tolerance, col. 14 lines 52-56 and Fig. 6, Fault Tolerant Design).

Referring to claim 14, Dobbins et al. discloses a network connectivity device comprising a central processing unit (Fig. 6, CPU) connected to a electronic storage device (Fig. 2, Packet RAM), a hub module (bridge or router, col. 4 lines 13-27, col. 24 lines 30-61 and col. 26 lines 38-57), a switch module (Fig. 5 ref. sign 40 and col. 13 lines 54-67), a repeater module (repeater module, col. 13 lines 34-41) and a router module (Fig. 6, Router), said connectivity device connected to a wire network (Fig. 1 and respective portions of the spec.) interconnecting a plurality of communication devices, said connectivity device configured to: utilize said router module (Fig. 6, Router) to perform a routing function including routing (this is inherent) communication transmissions through the wire network, wherein said connectivity device includes a central processing unit (Fig. 5 ref. sign 41, Fig. 6 ref. sign CPU, col. 13 lines 54-67, col. 14 lines 17-45, col. 15 lines 50-56, col. 26 lines 64-67 and col. 32 lines 37-67) configured to communicate with the hub module (bridge or router, col. 4 lines 13-27, col. 24 lines 30-61 and col. 26 lines 38-57) located within the connectivity device and the switch module (Fig. 5 ref. sign 40 and col. 13 lines 54-67) located within the connectivity device, said repeater module (repeater module, col. 13 lines 34-41) configured to perform a repeater function including amplifying communication transmissions to extend a distance between the communications devices, said hub module configured to perform a hub function including bringing segments (paths, col. 4 lines 13-27 and segments, col. 13 lines 48-53) of the wire network together, and said switch

module configured to perform a switching function including reducing communication collisions (fault tolerance, col. 14 lines 52-56 and Fig. 6, Fault Tolerant Design) by providing communication transmissions from the communications devices with independent paths (separate, col. 14 lines 1-16 and paths, col. 3 lines 59-61 and col. 17 lines 14-17) through the wire network, and said connectivity device configured to integrate a first function set (five functions, col. 4 lines 4-12 and five management service functions, col. 10 lines 7-18) and a second function set (see functionality, col. 14 lines 25-28), wherein the first function set includes a function (directory services, network access security services, accounting services and bandwidth management, col. 4 lines 4-12 and col. 10 lines 7-18) other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes a set at least one of the hub function, the switching function, the routing (routing, col. 4 lines 4-12) function, and the repeater function.

Referring to claim 15, Dobbins et al. discloses a network connectivity device (Fig. 6) in accordance with claim 14 further configured to connect at least one communication device to a wire network (LAN segment, col. 13 lines 48-53).

Referring to claim 16, Dobbins et al. discloses a network connectivity device in accordance with claim 14 further configured to function in a network system comprising at least one of a network hub (Fig. 6 ref. sign 30), a network switch (Fig. 6, Switching and Fig. 5 ref. sign 40 and col. 13 lines 54-67), a network repeater (repeater module, col. 13 lines 34-41), and a network router (Fig. 6, Router).

Referring to claim 17, Dobbins et al. discloses a network connectivity device in accordance with claim 14 further configured to function in a network system having a topology

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comprising at least one of a daisy-chain configuration, a ring configuration (Token Ring, col. 13 lines 48-53) and a star configuration.

Referring to claim 18, Dobbins et al. discloses a network connectivity device in accordance with claim 14 further configured to be at least one of a network fault tolerant device (C++ OOP, col. 14 lines 20-25 and fault tolerance, col. 14 lines 52-56) and a network fault tolerant management device (management network, col. 14 lines 20-25).

Referring to claim 19, Dobbins et al. discloses a network connectivity device in accordance with claim 14 further configured to enable SPOC (given port, col. 11 lines 10-15 and Fig. 7B ref. sign 80) capabilities with a network system.

Referring to claim 20, Dobbins et al. discloses a network connectivity device in accordance with claim 14 wherein said connectivity device (Fig. 6 and respective portions of the spec.) is a network node utilized in a communications network system comprising a plurality of communications devices (Fig. 1 and respective portions of the spec.) interconnected by a wire network (LAN segment, col. 13 lines 48-53).

Referring to claim 21, Dobbins et al. discloses a method in accordance with Claim 1 wherein said integrating, within the connectivity device, the first function set (five functions, col. 4 lines 4-12 and five management service functions, col. 10 lines 7-18) and the second function set (see functionality, col. 14 lines 25-28) comprises integrating, within a circuit (circuit, col. 6 lines 30-35, col. 7 lines 5-15, col. 26 lines 40-45, col. 26 lines 60-65) card, the first function set (five functions, col. 4 lines 4-12 and five management service functions, col. 10 lines 7-18) and the second function set (see functionality, col. 14 lines 25-28).

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Referring to claim 22, Dobbins et al. discloses a method in accordance with claim 1 wherein the first function set (five functions, col. 4 lines 4-12 and five management service functions, col. 10 lines 7-18) includes at least one of a print (printers, col. 24 lines 30-35) function and a programming (programming, col. 7 lines 15-20, col. 14 lines 9-11, col. 14 lines 20-25, col. 18 lines 50-52, col. 29 lines 5-10, col. 29 lines 45-50 and col. 32 lines 60-65) function.

3. Claims 1, 7, 14, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Picazo, Jr. et al. (U.S. Patent No. 6,006,275).

Referring to claim 1, Picazo, Jr. et al. discloses a method for forming a network including a plurality of communication devices, a wire network (Fig. 1 and respective portions of the spec.) for allowing a plurality of communication transmissions between the communications devices, and at least one connectivity device (Fig. 2 ref. signs 140 and 148 and respective portions of the spec.) connected to the wire network, said method comprising the steps of: utilizing the connectivity device to perform a repeater function including regenerating (repeat and retransmit, col. 1 lines 55-62) a communication signal such that the distance between the communications device is extended; utilizing the connectivity device to perform a routing function including routing (route, col. 16 lines 25-45, col. 20 lines 20-25 and col. 34 lines 15-20) communication transmissions by the communication devices through the wire network; and communicating, by a central processing unit (Fig. 2, ref. sign 144, Fig. 3 ref. sign 126 and col. 9 lines 29-67) located within the connectivity device, with a network hub device (Fig. 2 ref. sign 140 and col. 9 lines 29-46) located within the connectivity device and a network switch device (Fig. 2 ref. sign 150,

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Fig. 3 ref. sign 112, col. 9 lines 29-46, col. 10 lines 46-57) located within the connectivity device, wherein the network hub device performs a hub function including interconnecting the communication devices by bringing (bridge process, col. 9 lines 29-46) segments of the wire network together, and the network switch performs a switching function including reducing (cut down, col. 10 lines 1-8) communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network; and integrating, within the connectivity device, a first function set (bridging, in-band management and out-of-band management, col. 6 lines 25-30; processing functions, col. 32 lines 40-45; learning function, col. 34 lines 1-5) and a second function set (bridge function in hub/bridge, col. 8 lines 21-67 and switching/bridging and routing functions, col. 34 lines 10-15), wherein the first function set includes a function (in-band management and out-of-band management, col. 6 lines 25-30; processing functions, col. 32 lines 40-45; learning function, col. 34 lines 1-5) other than the hub function, the switching function, the routing function, and the repeater function, and the second function set (see bridge function in hub/bridge, col. 8 lines 21-67 and switching/bridging and routing functions, col. 34 lines 10-15) includes at least one of the hub function, the switching function, the routing function, and the repeater function.

Referring to claim 7, Picazo, Jr. et al. discloses a network system comprising: a plurality of communication devices configured to communicate with each other; a wire network (Fig. 1 and respective portions of the spec.) configured to interconnect said communications devices and allow a plurality of communication transmissions between said communication devices; a network connectivity device (Fig. 2 ref. signs 140 and 148 and respective portions of the spec.) connected to said wire network, said connectivity device configured to: perform a repeater

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function including amplifying (repeat and retransmit, col. 1 lines 55-62) communications transmissions such that the distance between said communications device is extended; and perform a routing function including routing (route, col. 16 lines 25-45, col. 20 lines 20-25 and col. 34 lines 15-20) communication transmissions through said wire network; and a central processing unit (Fig. 2, ref. sign 144, Fig. 3 ref. sign 126 and col. 9 lines 29-67) located within said network connectivity device and configured to communicate with a network hub device (Fig. 2 ref. sign 140 and col. 9 lines 29-46) located within said network connectivity device and a network switch device (Fig. 2 ref. sign 150, Fig. 3 ref. sign 112, col. 9 lines 29-46, col. 10 lines 46-57) located within said network connectivity device, wherein said network hub device configured to perform a hub function including interconnecting said communication devices by bringing (bridge process, col. 9 lines 29-46) segments of said wire network together, said network switch device configured to perform a switching function including reducing (cut down, col. 10 lines 1-8) communication collisions by providing communication transmissions from said communications devices with independent paths through said wire network, and said connectivity device configured to integrate a first function set (bridging, in-band management and out-of-band management, col. 6 lines 25-30; processing functions, col. 32 lines 40-45; learning function, col. 34 lines 1-5) and a second function set (bridge function in hub/bridge, col. 8 lines 21-67 and switching/bridging and routing functions, col. 34 lines 10-15), wherein the first function set includes a function (in-band management and out-of-band management, col. 6 lines 25-30; processing functions, col. 32 lines 40-45; learning function, col. 34 lines 1-5) other than the hub function, the switching function, the routing function, and the repeater function, and the second function set (see bridge function in hub/bridge, col. 8 lines 21-67 and switching/bridging

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and routing functions, col. 34 lines 10-15) includes at least one of the hub function, the switching function, the routing function, and the repeater function.

Referring to claim 14, Picazo, Jr. et al. discloses a network connectivity device comprising a central processing unit (Fig. 2, ref. sign 144, Fig. 3 ref. sign 126 and col. 9 lines 29-67) connected to a electronic storage device (Fig. 2, ref. sign 146), a hub module, a switch module (Fig. 2 ref. sign 150, Fig. 3 ref. sign 112, col. 9 lines 29-46, col. 10 lines 46-57), a repeater module (repeater, col. 2 lines 54-67, col. 3 lines 52-65, col. 6 lines 65-67 and col. 7 lines 33-44) and a router module (router, col. 7 lines 1-10 and col. 7 lines 30-35), said connectivity device connected to a wire network interconnecting a plurality of communication devices, said connectivity device configured to: utilize said router module to perform a routing function including routing (route, col. 16 lines 25-45, col. 20 lines 20-25 and col. 34 lines 15-20) communications through the wire network, wherein said connectivity device includes a central processing unit (Fig. 2, ref. sign 144, Fig. 3 ref. sign 126 and col. 9 lines 29-67) configured to communicate with said hub module (Fig. 2 ref. sign 140 and col. 9 lines 29-46) located within said connectivity device and said switch module (Fig. 2 ref. sign 150, Fig. 3 ref. sign 112, col. 9 lines 29-46, col. 10 lines 46-57) located within said connectivity device, said repeater module configured to perform a repeater (repeat and retransmit, col. 1 lines 55-62) function including amplifying communication transmissions to extend a distance between the communications devices, said hub module configured to perform a hub function including bringing (bridge process, col. 9 lines 29-46) segments of the wire network together, and said switch module configured to perform a switching function including reducing (cut down, col. 10 lines 1-8) communication collisions by providing communication transmissions from the communications

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devices with independent paths through the wire network, and said connectivity device configured to integrate a first function set (bridging, in-band management and out-of-band management, col. 6 lines 25-30; processing functions, col. 32 lines 40-45; learning function, col. 34 lines 1-5) and a second function set (bridge function in hub/bridge, col. 8 lines 21-67 and switching/bridging and routing functions, col. 34 lines 10-15), wherein the first function set includes a function (in-band management and out-of-band management, col. 6 lines 25-30; processing functions, col. 32 lines 40-45; learning function, col. 34 lines 1-5) other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes a set (see bridge function in hub/bridge, col. 8 lines 21-67 and switching/bridging and routing functions, col. 34 lines 10-15) at least one of the hub function, the switching function, the routing function, and the repeater function.

Referring to claim 21, Picazo, Jr. et al. discloses a method in accordance with Claim 1 wherein said integrating, within the connectivity device, the first function set (bridging, in-band management and out-of-band management, col. 6 lines 25-30; processing functions, col. 32 lines 40-45; learning function, col. 34 lines 1-5) and the second function set (bridge function in hub/bridge, col. 8 lines 21-67 and switching/bridging and routing functions, col. 34 lines 10-15) comprises integrating, within a circuit (circuits or circuitry, col. 2 lines 55-60, col. 6 lines 65-67; and circuit, col. 13 lines 5-10) card, the first function set (bridging, in-band management and out-of-band management, col. 6 lines 25-30; processing functions, col. 32 lines 40-45; learning function, col. 34 lines 1-5) and the second function set (bridge function in hub/bridge, col. 8 lines 21-67 and switching/bridging and routing functions, col. 34 lines 10-15).

Referring to claim 22, Picazo, Jr. et al. discloses a method in accordance with claim 1 wherein the first function set (bridging, in-band management and out-of-band management, col. 6 lines 25-30; processing functions, col. 32 lines 40-45; learning function, col. 34 lines 1-5) includes at least one of a print (printers, col. 1 lines 18-25) function and a programming (programming, col. 43 lines 30-35) function.

Response to Arguments

4. Applicant's arguments filed 10/28/2005 have been fully considered but they are not persuasive. Applicant argued that Dobbins et al. do not describe or suggest integrating, within the connectivity device, a first function set and a second function set, where the first function set includes a function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. However, one skilled in the art would recognize that the first function set is the five management service functions which consist of directory services, security services, routing services, bandwidth management and accounting services. The second function set is connectivity, bridging, routing, secure fast packet switching and ATM cell switching.

Applicant argued that Dobbins et al. do not describe or suggest the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. However, one skilled in the

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art would recognize that the first function set is the five management service functions which consist of directory services, security services, routing services, bandwidth management and accounting services. The second function set is connectivity, bridging, routing, secure fast packet switching and ATM cell switching.

Applicant argued that Dobbins et al. do not describe or suggest the network connectivity device as recited in Claim 14. Applicant argued further that Dobbins et al. do not describe or suggest the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. However, one skilled in the art would recognize that the first function set is the five management service functions which consist of directory services, security services, routing services, bandwidth management and accounting services. The second function set is connectivity, bridging, routing, secure fast packet switching and ATM cell switching.

Applicant argued that Picazo, Jr. et al. do not describe or suggest a method for forming a network as recited in claim 1. Applicant argued further that Picazo, Jr. et al. do not describe or suggest integrating, within the connectivity device, a first function set and a second function set, where the first function set includes a function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. However, one skilled in the art would recognize that the first function set is bridging,

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in-band management and out-of-band management. The second function set is switching/bridging and routing functions.

Applicant argued that Picazo, Jr. et al. do not describe or suggest a network system as recited in claim 7. Applicant further argued that Picazo, Jr. et al. do not describe or suggest the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function.

However, one skilled in the art would recognize that the first function set is bridging, in-band management and out-of-band management. The second function set is switching/bridging and routing functions.

Applicant argued that Picazo, Jr. et al. do not describe or suggest a network connectivity device as recited in claim 14. Applicant further argued that Picazo, Jr. et al. do not suggest or describe the connectivity device configured to integrate a first function set and a second function set, where the first function set includes a function other than the hub function, the switching function, the routing function, and the repeater function, and the second function set includes at least one of the hub function, the switching function, the routing function, and the repeater function. However, one skilled in the art would recognize that the first function set is bridging, in-band management and out-of-band management. The second function set is switching/bridging and routing functions.

Conclusion

5. **Any response to this action should be mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-3143. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 2600 Customer Service whose telephone number is (571) 272-2600.



Jamal A. Fox



WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER